

Increase in pertussis cases in South Africa

There were very few pertussis cases reported through the pneumonia surveillance programme in 2020 (n=9) and 2021 (n=1) in South Africa, likely as a result of decreased transmission related to non-pharmaceutical interventions to prevent the spread of SARS-CoV-2. In 2022, there has been an increase in pertussis cases detected in the pneumonia surveillance programme. From January to June 2022, 35 of the 6 624 (0.5%) patients who were tested for *Bordetella pertussis* tested positive. The increased detection of pertussis cases was seen in July, with the percentage of cases testing positive at 11.4 % (n = 4/35) in July, 62.0% (n = 22/35) in August and 14.3% (n = 4/35) in September (testing for September is ongoing) (Figure 5). The increase in laboratory-confirmed pertussis cases was predominantly from sentinel surveillance sites in one province (Western Cape) (Figure 6). At pneumonia surveillance sites, the pertussis detection rate was 1.7% (232/1911) for Western Cape Province, 0.07% (1/1349) for Gauteng Province and 2.0% (2/722) for Mpumalanga Province. Of all pertussis cases, 83.9% (29/35) were children under 5 years of age and of those 51.7% (15/29) were children <3 months. Among the 32 pertussis-positive cases with data available on the outcome, there was no mortality reported.

have been reported since July 2022. The highest number of cases was reported by Western Cape Province (62/147, 42%). In July and August 2022, the cases reported were evenly distributed across provinces and in keeping with numbers reported before COVID-19, while in September 2022, the majority of cases, 79% (38/48) were reported from Western Cape Province. Of the cases reported by the Western Cape Province, the majority (n=34, 89%) were in children <5 years of age, of which 74% (25/34) were children aged <3 months.

Pertussis, commonly known as ‘whooping cough’ is a vaccine-preventable disease caused by *Bordetella pertussis* and is a category 1 notifiable medical condition. Clinicians are advised to be vigilant for cases, especially in very young children who may not present with typical symptoms of pertussis (cough and whoop), to conduct diagnostic testing where appropriate, to notify cases and prescribe post-exposure prophylaxis to close and high-risk contacts of suspected or confirmed cases. NICD recommendations for pertussis diagnosis, management and public health response may be found on the NICD web page (<http://www.nicd.ac.za/index.php/pertussis/>). Notification forms can be accessed at <http://www.nicd.ac.za/index.php/nmc/>. An alert for increased pertussis cases was released on the 21st of September 2022 (<https://www.nicd.ac.za/increase-in-pertussis-cases-in-south-africa-21-sept-2022/>).

An increase in pertussis cases was also observed from the Notifiable Medical Conditions (NMC) surveillance system. From January to September 2022, 147 cases of pertussis were reported to the NMC system, of which 109/147 (74%)

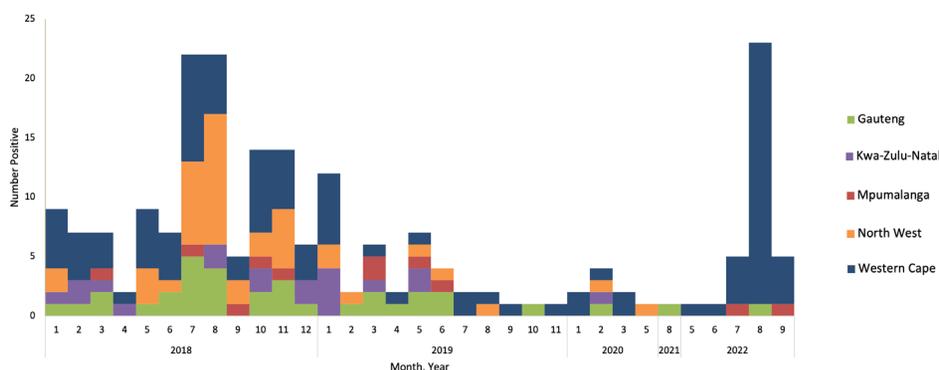


Figure 5. Number of laboratory-confirmed pertussis cases from pneumonia surveillance programme by year, month and province, 2018-2022

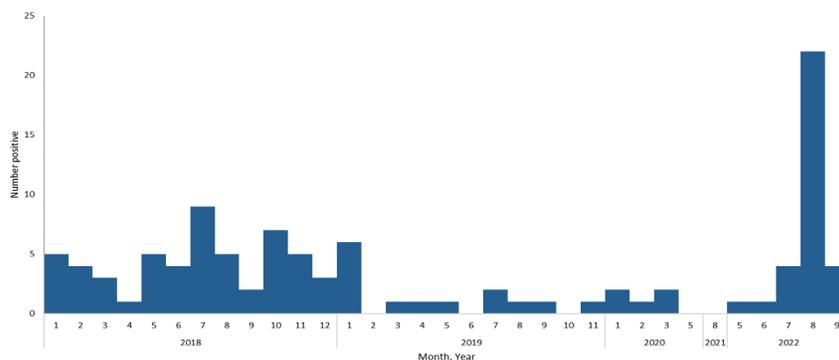


Figure 6. Number of laboratory-confirmed pertussis cases from pneumonia surveillance programme by year, month in Western Cape, 2018-2022

Source: Centre for Respiratory Diseases and Meningitis, NICD-NHLS; cherylc@nicd.ac.za